ABSTRACT

An R-Fe-B based thin film magnet including an R-Fe-B based alloy which contains 28 to 45 percent by mass of R element (where R represents at least one type of rare-earth lanthanide elements) and which is physically formed into a film, wherein the R-Fe-B based alloy has a composite texture composed of $R_2Fe_{14}B$ crystals having a crystal grain diameter of 0.5 to 30 μm and R-element-rich grain boundary phases present at boundaries between the crystals. The magnetization characteristics of the thin film magnet are improved. The R-Fe-B based thin film magnet can be prepared by heating to 700°C to 1,200°C during physical film formation or/and the following heat treatment, so as to grow crystal grains and form R-element-rich grain boundary phases.